AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) An optical device comprising:

an input fiber having a cladding and a core for receiving a light input;

a target fiber having a cladding and a core;

the cladding of the input fiber and the cladding of the target fiber being close together to define a coupling region in which light is coupled from the cladding of the input fiber to the cladding of the target fiber;

a first perturbation for wavelength-selective coupling of light from the core of the input fiber into the cladding of the input fiber; and

a second perturbation for wavelength selective coupling of light from the cladding of the target fiber into the core of the target fiber,

wherein at least one of the first and second perturbations is in the cladding and the first perturbation and the second perturbation do not overlap, and the coupling region is located between the first and second perturbations in a lengthwise direction.

2. (Original) The device of claim 1, wherein the coupling region is between 1mm and 500 mm long along a lengthwise direction of the fibers.

3. (Original) The device of claim 1, wherein the fibers are no more than about 10 microns apart in the coupling region.

4. (Original) The device of claim 1, wherein the second perturbation is formed in the cladding of the target fiber.

5. (Original) The device of claim 4, wherein the core of the target fiber does not have a wavelength-selective perturbation.

6. (Original) The device of claim 1, wherein the first perturbation is formed in the cladding of the input fiber.

7. (Original) The device of claim 6, wherein the core of the input fiber does not have a wavelength-selective perturbation.

8. (Original) The device of claim 6, wherein the second perturbation is formed in the cladding of the target fiber.

9. (Original) The device of claim 8, wherein neither the core of the input fiber nor the core of the target fiber has a wavelength-selective perturbation.

10. (Original) The device of claim 1, further comprising a third fiber with a core and a cladding and a third perturbation formed in the one of the core and cladding of the third fiber, wherein the target fiber is used to remove light with a first wavelength from the input fiber, and wherein the third fiber receives a light input and is positioned close to the input fiber to define a coupling region to couple light with a second wavelength from the third fiber define a coupling region to couple light with a second wavelength from the third fiber into the input fiber, the third fiber being used to add light with a desired wavelength.

11. (Original) The device of claim 10, wherein the first and second wavelengths are the same.

12. (Original) The device of claim 1, further comprising third perturbation for wavelength-selective coupling of light from the cladding of the input fiber to the core of the input fiber, the perturbations being arranged such that light with a first wavelength is input to the target fiber and included in an output of the input fiber, and light with a second wavelength is dropped from the input fiber.

13. (Original) In the optical device of claim 1, further comprising a third fiber having a core and a cladding with the core of the third fiber receiving a light input and providing some of the received light to the target fiber, the third fiber having a third perturbation for wavelength-selective coupling of light from the core of the third fiber into the core of the target fiber, the claddings of the third fiber and the target fiber being close together in a second coupling region, a method of introducing into the input fibers light so that a portion of light from each of the input fibers combines in the target fiber.

14. (Original) The method of claim 13, wherein the introducing is performed with pump lasers.

15. (Original) The method of claim 13, wherein the light that is introduced results in light in the target fiber that is sufficiently intense for use as a pump for a fiber laser.

16. (Cancel)

17. (Previously presented) An optical device comprising:

a first fiber having a cladding and a core for receiving a light input and providing an output;

a second fiber having a cladding and a core;

the cladding of the first fiber and the cladding of the second fiber being close together to define a coupling region in which light is coupled from the cladding of the first fiber to the cladding of the second fiber;

a first perturbation for wavelength-selective coupling of light from the core of the first fiber into the cladding of the first fiber;

a second perturbation for wavelength-selective coupling of light form the cladding of the second fiber into the core of the second fiber;

wherein the second fiber receives a light input and the second perturbation provides wavelength-selective coupling from the input of the second fiber to the cladding of the second fiber and the coupling region couples the light from the cladding of the second fiber to the cladding of the first fiber; and

a third perturbation located in the first fiber for wavelength-selective coupling of the light coupled from the cladding of the second fiber into the cladding of the first fiber into the core of the first fiber, the device thereby forming an add/drop multiplexer in which the second fiber is used to add and drop light at the desired wavelengths.

18. (Currently amended) An add/drop multiplexer consisting essentially of two optical fibers, each optical fiber having a core and a cladding layer, each optical fiber having a perturbation formed therein, and at least one of the perturbations is formed in the cladding of one of the optical fibers, the fibers positioned close together but without overlapping the perturbations of the fiber to allow coupling between the cladding of the two fibers.

19. (Previously presented) An optical device comprising:

an input fiber having a cladding and a core for receiving a light input;

a target fiber having a cladding and a core;

the cladding of the input fiber and the cladding of the target fiber being close together to define a coupling region in which light is coupled from the cladding of the input fiber to the cladding of the target fiber;

a first perturbation for wavelength-selective coupling of light from the core of the input fiber into the cladding of the input fiber; and

a second perturbation for wavelength selective coupling of light from the cladding of the target fiber into the core of the target fiber,

wherein one of the first and second perturbations is in the cladding and the other of the first and second perturbations is in the core and the coupling region is between the first and second perturbations in a lengthwise direction.

20. (Cancel)

21. (Currently amended) An optical device, comprising:

an optical fiber having a core and a cladding for receiving a light input, the core capable of transmitting light in a core mode and the cladding having a first index of refraction and capable of transmitting light in a cladding mode;

a[n] planar optical waveguide having a second index of refraction less than the first index of refraction; and

wherein the cladding of the planar optical fiber is positioned closely to the optical waveguide forming a coupling region between the cladding of the optical fiber

and the planar optical waveguide such that the cladding mode transmitted in the cladding of the optical fiber excites a mode in the planar optical waveguide.

22. (Previously added) The optical device of claim 21, the optical fiber further comprising a perturbation for wavelength-selective coupling of light transmitted in the core mode by the core of the optical fiber into the cladding mode transmitted by the cladding of the optical fiber.